1 PETITION to the Commissioner begins on page 3 of this paper.

2

3 AMENDMENTS to the Specification, including Background, Summary,

4 Drawing Description, and Description of the Preferred Embodiments

5 begin on page 10 of this paper.

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7 AMENDMENTS to the Claims begin on page 13 of this paper.

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9 REMARKS begin on page 18 of this paper.

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1 <u>Petition to the Commissioner</u>

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3   Applicant hereby petitions the Commissioner of Patents, under

4 37 CFR 1.181 et seq., or any other CFR section deemed appropriate

5 by the Commissioner, and authorizes payment of fees under 37 CFR

6 1.17 et seq., or any other CFR section deemed appropriate, with

7 authorization to charge Account No. 010428 for any fees deemed due

8 in connection with the filing of this document in the U.S. Patent

9 and Trademark Office, to reassign the present application to an

10 examiner and a supervisor possessing at minimum level: 1) a basic

11 understanding of electronic communications communicating

12 informational content with various forms for synchronous and

13 asynchronous signaling; 2) a basic understanding of electronic

14 communications art parlance; and 3) an ability to properly reject

15 claims based upon teachings and suggestions of cited references.

16

17   NOW COMES, the applicant, with kind due respect, requesting a

18 change in the examiner as there appears recurring unsupported

19 rejections based upon an apparent inability to understand basic

20 electronic communications communicating informational content with

21 various forms for synchronous and asynchronous signaling, to

22 understand basic electronic communications art parlance, and to

23 properly reject claims based upon teachings and suggestions of

24 cited references rather than unsupported and forbidden hindsight

25 reconstruction as the basis of claim rejection. This case was filed

26 on May 23, 2000, and after six years of applicant taking the time

27 to instruct the examiner as to certain aspects of electronic

28 communications, electronic parlance, and forbidden hindsight

reconstruction, the examiner persists in his rejections and failures to appropriately amend the specification, at unnecessary and large waste of governmental and applicant resources. After six years, of fruitless instruction to the examiner, enough is enough. It was hoped that the RCE would have provided a fresh examination.

A very brief history and statement of this case seems appropriate at this juncture. The invention uses a sigma delta modulator to generate a binary signal having pulse width indicating an analog value input. This binary signal is transmitted as an asynchronous signal in binary form still having a pulse width representing an analog value of the analog input signal where the sigma delta modulator drives an optical laser transmitter transmitting the same pulse width representing a signal to an optical laser receiver having a filter for determining the pulse width, and hence, the analog value. As such, the transmitted signal is asynchronous, in that, it does not use error correcting codes, bit transitions, or framing data bits during optical transmission as an advancement in the art. The background of specifications clearly sets forth these synchronization problems that the present invention solves.

The terms synchronous and asynchronous are well understood by anyone, that is, anyone skilled in the art. Even college students in their first introductory course in electronic communications understand the difference between synchronous and asynchronous communications, yet, the examiner seems to lack this basic understanding. Claims should be couched in positive language, that

is, stated as to what the invention is, and not what the invention
is not. The original claims did not use the term asynchronous, a
lack of synchronism, which feature solves the problems as stated in
the background. The asynchronous communication aspect is inherent
in the functional combination of the original claimed inventions.

After the examiner rejected the claims as to obviousness that
includes both a consideration of the problem solved as well as the
solution thereto, the specification and the claims were amended to
specifically require the examiner to consider the problem solved.
The examiner did not take this helpful instructive amendment as
intended, but rather, made what is believed to be rather dubious
assertions that the specification does not teach asynchronous
communications, yet, the specification clearly states that the
communication signals are transmitted without frames that is one of
many kinds of synchronous signaling. The original claims did not,
properly, use such language as "without framing bits". To help the
examiner more fully understand the invention, as understanding
seemed lacking, the specification was amended to specifically
include the terms synchronous and asynchronous. The claims were
amended, without an apparent need to do so, accepting of course, as
an aid to the examiner, to more fully understand the invention to
include "without framing" in positive language, that is with the
term " frame asynchronous", so as to focus attention as to the
novel aspects. Notwithstanding this painful instruction and adding
unnecessary claim limitations, the examiner persisted in rejecting
the claims under 35 USC 112, apparently, failing to exhibit a
minimum understanding of the art and its parlance.

1   What more could one do to aid the examiner, to assist the

2   examiner in understanding a basic concept of electronic

3   communications?

4

5   With respect to claim 1, the base independent claim, as well

6   as claim 11, the second independent claim, the examiner rejects

7   under 35 USC 103 as unpatentable as obvious. The rejections are

8   primarily based on two isolated cited references, Beauducel in view

9   of Palmer, having no relevant connection between them, other than,

10 both use a sigma delta modulator for modulation and that, Beauducel

11 teaches electrical and optical communications and Palmer

12 specifically teaches optical laser transmission. Both of these two

13 references teach synchronous communications. How possibly could the

14 cited references, using or suggesting synchronous optical

15 communications, be used to reject claims properly based upon

16 asynchronous communications? Actually, where all of the cited

17 references teach away from the present invention, it is strong

18 evidence of nonobviousness.

19

20 The combination of these two references, teaching or

21 suggesting the use of a sigma delta modulator for synchronous

22 communication to arrive at the claim invention is forbidden

23 hindsight reconstruction. The sigma delta modulator in the present

24 application uses a local clock to modulate the pulse width with a

25 time duration length, that is, the horizontal pulse width

26 indicating an analog input value, the sought after information to

27 be asynchronously communicated. The cited references use a local

28 clock signal to modulate vertically the communication signal having

bit transitions, and hence, are synchronous communications. There is a clear difference. Additionally, there are no practical combinations of these cited references to arrive at the claimed combination, one of the hallmarks of forbidden hindsight reconstruction.

The examiner cites Beauducel Col 3 lines 56-62 as teaching "the modulated binary laser signal having a pulse width having a duration representative of the analog input signal (inherent in modulation)". Yet, Col 3 lines 45-62 explicitly teach the "synchronization element 5" that is local clock for providing transitions, and teach "the coding circuit 6" that is a multi level code for providing a coded signal. This language clearly teaches synchronism and coding so as to provide a binary signal having transitions. The synchronicity and the coding are the exact types of problems that the present invention solves. Claim 1 limitation provides "a pulse width having a duration representative of the analog input signal" When the analog signal is "coded", it loses its pulse width that would represent the analog value during transmission. Hence, the communicated signal is neither binary, synchronous, nor having a pulse width representing analog value.

Palmer is cited for the proposition that sigma delta modulators have been used with lasers. Agreed, but, so what? The novel aspect of the invention is directed to the particularly claimed type of laser modulation over the optical communication medium, and that is, "a pulse width having a duration representative of the analog input signal". Palmer teaches a

1 coherent laser transmission communication system, inherently

2 having, the required and necessary, optical modulation using "an

3 embedded clock" at Col 2 lines 5-12. What the examiner is

4 attempting to do, is to take, a precursor condition, that is,

5 transforming an analog signal into one represented by a pulse

6 width, admitted prior art, and a constituent aspect of the

7 synchronized signal of Beauducel, while ignoring the

8 synchronization aspect of Beauducel and Palmer for purposes of

9 transmission, and then jumps to the claimed invention without any

10 suggestion to do so, and contrary to the explicit teachings of

11 Beauducel and Palmer, smacking of forbidden hindsight

12 reconstruction.

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1   The examiner also relies upon the phrase "the data stream is

2   self synchronizing", taken is isolation, unfairly so. What the

3   examiner fails to take into account, is that a digital filter on

4   the receiver side effectively filters the transmitted signal so as

5   to determine the pulse width and hence to reconstruct the analog

6   value, and in this sense, the "data stream is self synchronizing".

7   Applicant never stated that the binary signal had bit transitions

8   within the pulse with, used codes, or frames, or any other

9   signaling method that would render the communication signal as

10   being synchronously communicated. The examiner's reference to "the

11   data stream" in the context of an over all system explanation to

12   the particular binary signal having "a pulse width" just smacks of

13   grasping for any justification to reject the claims, by applying

14   applicant's words to different features and out of context, and

15   hence, shows a demonstrable bias of being unfair and impartial to

16   the present application.

17

18   With kind due respects, applicant request that another

19   examiner be assigned to the present application, which examiner

20   should have a basic understanding of electronic communications and

21   parlance and who can read cited references for they reasonably

22   teach.

23

24   Respectfully Submitted

25   *Derrick Michael Reid*

26   Derrick Michael Reid

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